RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number:	/0/591,432
Source:	IFWP.
Date Processed by STIC:	9/13/06

ENTERED



IFWP

RAW SEQUENCE LISTING DATE: 09/13/2006
PATENT APPLICATION: US/10/591,432 TIME: 13:16:43

Input Set : N:\RJAVED\10591432.txt

Output Set: N:\CRF4\09132006\J591432.raw

```
3 <110> APPLICANT: Frohberg, Claus
             Koetting, Oliver
              Ritte, Gerhard
              Steup, Martin
      8 <120> TITLE OF INVENTION: Plants with increased activity of multiple starch
phosphorylating enzymes
     10 <130> FILE REFERENCE: 65084.000022
C--> 12 <140> CURRENT APPLICATION NUMBER: US/10/591,432
     13 <141> CURRENT FILING DATE: 2006-09-01
     15 <150> PRIOR APPLICATION NUMBER: EP 04090089.6
     16 <151> PRIOR FILING DATE: 2004-03-05
     18 <150> PRIOR APPLICATION NUMBER: US 60/550,021
     19 <151> PRIOR FILING DATE: 2004-03-05
     21 <150> PRIOR APPLICATION NUMBER: EP 04090284.3
     22 <151> PRIOR FILING DATE: 2004-07-21
     24 <150> PRIOR APPLICATION NUMBER: EP 04090121.7
     25 <151> PRIOR FILING DATE: 2004-03-29
     27 <160> NUMBER OF SEQ ID NOS: 39
     29 <170> SOFTWARE: PatentIn version 3.1
     31 <210> SEO ID NO: 1
     32 <211> LENGTH: 3591
     33 <212> TYPE: DNA
     34 <213> ORGANISM: Arabidopsis thaliana
     36 <220> FEATURE:
     37 <221> NAME/KEY: CDS
     38 <222> LOCATION: (1)..(3591)
     39 <223> OTHER INFORMATION:
W--> 42 < 400 > 1
     43 atg gag agc att ggc agc cat tgt tgc agc tct cct ttc acc ttc atc
                                                                               48
     44 Met Glu Ser Ile Gly Ser His Cys Cys Ser Ser Pro Phe Thr Phe Ile
     45 1
                        5
     47 act aga aac tca tca tca tct cct aga ctc gtt aac atc act cac
                                                                               96
     48 Thr Arg Asn Ser Ser Ser Leu Pro Arg Leu Val Asn Ile Thr His
     51 aga gtt aat ctc agc cac caa tct cac cga ctc aga aac tcc aat tct
                                                                              144
     52 Arq Val Asn Leu Ser His Gln Ser His Arq Leu Arg Asn Ser Asn Ser
     53
                35
                                    40
     55 cqt ctc act tqc act qct act tct tct tcc acc att gag gaa caa cqq
                                                                              192
     56 Arg Leu Thr Cys Thr Ala Thr Ser Ser Ser Thr Ile Glu Glu Gln Arg
                                55
     59 aag aag aaa gat gga tca gga acg aaa gtg agg ttg aat gtg agg tta
                                                                              240
     60 Lys Lys Lys Asp Gly Ser Gly Thr Lys Val Arg Leu Asn Val Arg Leu
                            70
                                                75
     63 gat cat caa gtt aat ttt ggt gac cat gtg gct atg ttt gga tca gct
                                                                              288
```

65	His	Gln		Asn 85	Phe	Gly	Asp	His	Val 90	Ala	Met	Phe	Gly	Ser 95	Ala	
67 aaa	gag	att	ggt	tca	tgg	aaa	aag	aaa	tcg	cct	ttg	aat	tgg	agt	gag	336
68 Lys	Glu	Ile	_	Ser '	Trp	Lys	Lys	-	Ser	Pro	Leu	Asn	_	Ser	Glu	
69			100					105					110			5.0.4
71 aat																384
72 Asn 73	GIA	11p	vaı	Cys (GIU	Leu	120	ьеи	ASP	Gry	GIY	125	vaı	Lеu	Giu	
75 75 tat	aaq	-	at.c	att (at.t.	aaα		gat.	aat.	t.ca	ct.t		t.aa	gaa	tct	432
76 Tyr	_		_		_	_		_						-		
77	130					135		-	•		140		_			
79 ggt	gat	aat	cgt	gtc (ctt	aag	gtt	cca	aat	tct	ggg	aat	ttt	tct	gtt	480
80 Gly	Asp	Asn	Arg	Val :	Leu	Lys	Val	Pro	Asn	Ser	Gly	Asn	Phe	Ser	Val	
81 145					150					155					160	
83 gtt																528
84 Val	Cys	His			Ala	Thr	Arg	Glu		Leu	Asp	Leu	Pro		Glu	
85				165					170					175	+	576
87 gtt			_	_	_	_		_								576
88 Val 89	GLY	ASII	180	Asp .	Asp	vaı	Gry	185	Gry	Gry	птэ	GIU	190	нар	ASII	
91 cat	gat	at.t.		gat (gat	aga	ata		aga	agt.	gaa	aat		aca	cag	624
92 His																
93	•	195	4	-	_		200		-			205	-			
95 ctt	cag	aag	agt	aca	ttg	ggt	ggg	caa	tgg	caa	ggt	aaa	gat	gcg	tcc	672
96 Leu	Gln	Lys	Ser	Thr :	Leu	Gly	Gly	Gln	Trp	Gln	Gly	Lys	Asp	Ala	Ser	
97	210					215					220					
99 ttt		cgt	tct	aat 🧃	gat	cat	ggt	aac	aga	gaa	gtt	ggt	aga	aat	taa	720
		_		_									_			
		Arg		Asn	Asp	His	Gly					. Gly	/ Arc		1 Trp	
101 22	5		ser Ser		Asp 230	His	_	Asn	Arg	235	5			Asr	1 Trp 240	
101 22 103 ga	5 t act	agt:	g Ser ggt	ctt	Asp 230 gaa	His ggc	aca	Asn gct	Arg	235 aag	; , atç	g gtt	gaç	Asr ggt	Trp 240 gat	768
101 22 103 ga 104 As	5 t act	agt:	g Ser ggt	ctt Leu	Asp 230 gaa	His ggc	aca	Asn gct	Arg	235 aag Lys	; , atç	g gtt	gaç	Asr ggt	Trp 240 gat Asp	
101 22 103 ga 104 As 105	5 t act p Thr	agt Ser	Ser ggt Gly	ctt Leu 245	Asp 230 gaa Glu	His ggc Gly	aca Thr	Asn gct Ala	ctt Leu 250	235 aag Lys	atg Met	g gtt : Val	gag Glu	Asr g ggt i Gly 255	Trp 240 gat Asp	
101 22 103 ga 104 As	5 t act p Thr c aac	agt Ser	g Ser ggt Gly aag	ctt Leu 245 aac	Asp 230 gaa Glu tgg	His ggc Gly	aca Thr	Asn gct Ala aag	ctt Leu 250	235 aag Lys gaa	ato Met	ggtt Val	gag Glu	Asr ggt Gly 255 gag	Trp 240 gat Asp gtt	768
101 22 103 ga 104 As 105 107 cg	5 t act p Thr c aac	agt Ser	g Ser ggt Gly aag	ctt Leu 245 aac	Asp 230 gaa Glu tgg	His ggc Gly	aca Thr	Asn gct Ala aag	ctt Leu 250	235 aag Lys gaa	ato Met	ggtt Val	gag Glu	g Asr g ggt i Gly 255 g gag g Gli	Trp 240 gat Asp gtt	768
101 22 103 ga 104 As 105 107 cg 108 Ar 109 111 at	5 t act p Thr c aac g Asr a gtt	agt Ser tct Ser	g Ser ggt Gly aag Lys 260 g agt	ctt Leu 245 aac Asn gtt	Asp 230 gaa Glu tgg Trp	ggc Gly tgg Trp	aca Thr aga Arg	Asn gct Ala aag Lys 265 ggaa	ctt Leu 250 ctt Leu	235 aag Lys gaa Glu	ato Met ato Met	g gtt Val g gta Val	gag Glu a cgc Arg 270	g Asr g ggt i Gly 255 g gag g Gli	Trp 240 gat Asp ggtt Val tac	768
101 22 103 ga 104 As 105 107 cg 108 Ar 109 111 at 112 II	5 t act p Thr c aac g Asr a gtt	agt Ser Ser tot Ser ggg	g Ser ggt Gly aag Lys 260 g agt	ctt Leu 245 aac Asn gtt	Asp 230 gaa Glu tgg Trp	ggc Gly tgg Trp	aca Thr aga Arg	Asn gct Ala aag Lys 265 g gaa	ctt Leu 250 ctt Leu	235 aag Lys gaa Glu	ato Met ato Met	g gtt Val g gta Val g gcg	gag Glu Glu Arg 270 g cto	g Asr g ggt i Gly 255 g gag g Gli	Trp 240 gat Asp ggtt Val tac	768 816
101 22 103 ga 104 As 105 107 cg 108 Ar 109 111 at 112 I1	t act p Thr c aac g Asr a gtt e Val	agt Ser Ser tct Ser Ser Gly 275	g Ser ggt Gly aag Lys 260 g agt Ser	ctt Leu 245 aac Asn gtt Val	Asp 230 gaa Glu tgg Trp gag Glu	ggc Gly tgg Trp agg	aca Thr aga Arg	Asn gct Ala aag Lys 265 ggaa Glu	ctt Leu 250 ctt Leu . cga	235 aag Lys gaa Glu ttg	ato Met ato Met Met aao	g gtt Val g gta Val g gcg s Ala	gag Glu Glu Arg 270 cto	g Asr g ggt i Gly 255 g gag g Gli c ata	Trp 240 gat Asp 5 gtt Val	768 816 864
101 22 103 ga 104 As 105 cg 108 Ar 109 111 at 112 I1 113	t act p Thr c aac g Asr a gtt e Val	agt Ser Ser tot Ser Gly 275	g Ser ggt Gly aag Lys 260 agt Ser	ctt Leu 245 aac Asn gtt Val	Asp 230 gaa Glu tgg Trp gag Glu aag	His ggc Gly tgg Trp agg Arg	aca Thr aga Arg Glu 280	Asn gct Ala aag Lys 265 gaa Glu	Arg	235 aag Lys gaa Glu ttg Leu ggt	ato Met ato Met aco Lys	g gtt Val g gta g gcg s Ala 285 g att	gag Gli Arg 270 cto Lei	g Asr g ggt i Gly 255 g gag g Glu) at at a	Trp 240 gat Asp 5 gtt Val tac Tyr	768 816
101 22 103 ga 104 As 105 107 cg 108 Ar 109 111 at 112 I1 113 115 tc 116 Se	t act p Thr c aac g Asr a gtt e Val t gca r Ala	agt Ser Ser Ser Ser Gly 275	g Ser ggt Gly aag Lys 260 agt Ser	ctt Leu 245 aac Asn gtt Val	Asp 230 gaa Glu tgg Trp gag Glu aag	His ggc Gly tgg Trp agg Arg	aca Thr aga Arg Glu 280 ata	Asn gct Ala aag Lys 265 gaa Glu	Arg	235 aag Lys gaa Glu ttg Leu ggt	ates Met ates Met ates ates ates ates ates ates ates at	g gtt Val g gta Val g gcg s Ala 289 att	gag Gli Arg 270 cto Lei	g Asr g ggt i Gly 255 g gag g Glu) at at a	Trp 240 gat Asp 5 gtt Val tac Tyr	768 816 864
101 22 103 ga 104 As 105 107 cg 108 Ar 109 111 at 112 II 113 115 tc 116 Se 117	t act p Thr c aac g Asr a gtt e Val t gca r Ala 290	agt Ser Ser Ser Ser 275 275 a att	g Ser ggt Gly aag Lys 260 g agt Ser tat	ctt Leu 245 aac Asn gtt Val ttg Leu	Asp 230 gaa Glu tgg Trp gag Glu aag Lys	His ggc Gly tgg Trp agg Arg tgg	aca Thr aga Arg Glu 280 ata	Asn gct Ala aag Lys 265 gaa Glu aac Asn	ctt Leu 250 ctt Leu Arg	235 aag Lys gaa Glu ttg Leu ggt	ato ato ato Met Met aao Lys Cao Glr	g gtt Val g gta val g gcg s Ala 285 att	gaç Glu Glu Arç 270 g cto Leu Cto	y Asr y ggt y Gly 255 c gag g Glu) ata i Ile	Trp 240 gat Asp gtt Val tac Tyr ttt Phe	768 816 864 912
101 22 103 ga 104 As 105 107 cg 108 Ar 109 111 at 112 I1 113 115 tc 116 Se 117 119 ga	t act p Thr c aac g Asr a gtt e Val t gca r Ala 290 a gat	agt Ser Ser Gly 275 att Ile	g Ser ggt Gly aag 260 agt Ser tat Tyr	ctt Leu 245 aac Asn gtt Val ttg Leu cat	Asp 230 gaa Glu tgg Trp gag Glu aag Lys	His ggc Gly tgg Trp agg Arg tgg 295	aca Thr aga Arg Glu 280 ata Ile	Asn gct Ala aag Lys 265 gaa Glu aac Asn	ctt Leu 250 ctt Leu Arg	235 aag Lys gaa Glu ttg Leu ggt	y ato y ato n ato n Met y aao n Lys cao y Glr 300	g gtt Val g gta g gta t Val g gcg g Ala 285 att g Ile	gag Glu Glu Glu Glu Glu Glu Glu Glu Glu Glu	y Asr y ggt y Gly 255 c gag g Glu) at at a t Ile t tgt	Trp 240 gat Asp gtt Val tac Tyr ttt g Phe	768 816 864
101 22 103 ga 104 As 105 107 cg 108 Ar 109 111 at 112 I1 113 115 tc 116 Se 117 119 ga 120 Gl	t act p Thr c aac g Asr a gtt e Val t gca t Ala 290 a gat u Asp	agt Ser Ser Gly 275 att Ile	g Ser ggt Gly aag 260 agt Ser tat Tyr	ctt Leu 245 aac Asn gtt Val ttg Leu cat	Asp 230 gaa Glu tgg Trp gag Glu aag Lys	His ggc Gly tgg Trp agg Arg tgg Trp 295 cgt	aca Thr aga Arg Glu 280 ata Ile	Asn gct Ala aag Lys 265 gaa Glu aac Asn	ctt Leu 250 ctt Leu Arg	235 aag Lys gaa Glu ttg Leu ggt	y ato y ato n ato n Met y aao n Lys c cao Glr 300 c gco	g gtt Val g gta g gcg s Ala 285 att lle	gag Glu Glu Glu Glu Glu Glu Glu Glu Glu Glu	y Asr y ggt y Gly 255 c gag g Glu) at at a t Ile t tgt	Trp 240 gat Asp gtt Val tac Tyr ttt g Phe	768 816 864 912
101 22 103 ga 104 As 105 107 cg 108 Ar 109 111 at 112 I1 113 115 tc 116 Se 117 119 ga	t act p Thr c aac g Asr a gtt e Val t gca r Ala 290 a gat u Asp	agt Ser Ser Ser Ser 2999 279 a att	g Ser ggt Gly aag 260 agt Ser tat Tyr	ctt Leu 245 aac Asn gtt Val ttg Leu cat	Asp 230 gaa Glu tgg Trp gag Glu aag Lys cac	His ggc Gly tgg Trp agg Arg tgg Trp 295 cgt	aca Thr aga Arg Glu 280 ata Ile	Asn gct Ala aag Lys 265 gaa Glu aac Asn	ctt Leu 250 ctt Leu Arg	235 aag Lys gaa Glu ttg Leu ggt Gly cat g Cat g Las 315	g atom atom according to the second s	g gtt Val g gta g gcg s Ala 285 att lle	gag Glu a cgc 270 ctc Leu cct Pro	g Asr g ggt g Gly 255 g gag g Glu) ata i Ile t tgt c Cys	Trp 240 gat Asp 5 gtt Val at tac Tyr ttt the Aga 320	768 816 864 912
101 22 103 ga 104 As 105 107 cg 108 Ar 109 111 at 112 I1 113 115 tc 116 Se 117 119 ga 120 Gl 121 30	t act p Thr c aac g Asr a gtt e Val t gca t Ala 290 a gat u Asr 5 ata	agt Ser Ser Ser 2999 275 a att a Ile	g Ser ggt Gly aag 260 agt Ser tat Tyr ggg	ctt Leu 245 aac Asn gtt Val ttg Leu cat His	Asp 230 gaa Glu tgg Trp gag Glu aag Lys cac His 310 ttg	His ggc Gly tgg Trp agg Arg Trp 295 cgt Arg	aca Thr aga Arg	Asn gct Ala aag Lys 265 gaa Glu aac Asn aac	ctt Leu 250 ctt Leu Arg aca Thr	235 aag Lys gaa Glu ttg Leu aggt Gly cat 315 agt	g ato g ato g ato n Met g aco g Cao g Glr g Glr g Glr aco	g gtt Val g gta g gcg s Ala 285 att 116	gag Gli Gli Arg 270 g cto Lei G cto Pro	Asr ggt ggt ggt 255 gag g Glu ata ille tgt cys tcc see Ser	Trp 240 gat Asp 5 gtt Val at tac Tyr ttt Fhe aga 320 act	768 816 864 912 960
101 22 103 ga 104 As 105 107 cg 108 Ar 109 111 at 112 I1 113 115 tc 116 Se 117 119 ga 120 G1 121 30 123 ct 124 Le 125	t act p Thr c aac g Asr a gtt e Val t gca r Ala 290 a gat u Asr t ata u Ile	agt Ser	g Ser ggt Gly aag Lys 260 agt Ser tat Tyr ggg Gly	ctt Leu 245 aac Asn gtt Val ttg Leu cat His gag Glu 325	Asp 230 gaa Glu tgg Trp gag Glu aag Lys cac His 310 ttg	His ggc Gly tgg Trp agg Arg Trp 295 cgt Arg	aca Thr aga Arg Glu 280 ata Ile cca Pro	Asn gct Ala aag Lys 265 gaa Glu aac Asn aac Asn	ctt Leu 250 ctt Leu Arg aca Thr	235 aag aag a Glu a ttg a ggt a Gly a cat a Gly a cat a Ser b Ser	g atom atom according to the second s	g gtt Val g gta 285 Ala 285 att 1160) C gag a Glu	gagaga Gluck Gagaga Gag	g Asr g ggt g Gly 255 g ggt g Glu ata i Ila t tgt Cys t Co Ser gct o Ala 335	Trp 240 gat Asp gtt Val at tac Tyr ttt Sphe Arg 320 act Thr 5	768 816 864 912 960
101 22 103 ga 104 As 105 107 cg 108 Ar 109 111 at 112 I1 113 115 tc 116 Se 117 119 ga 120 G1 121 30 123 ct 124 Le	t act p Thr c aac g Asr a gtt e Val t 290 a gat u Asr t ata u Ile	agt Ser	g Ser ggt Gly aag Lys 260 agt Ser tat Tyr ggg Gly cgt Arg	ctt Leu 245 aac Asn gtt Val ttg Leu cat His gag Glu 325 ctt	Asp 230 gaa Glu tgg Trp gag Glu aag Lys cac His 310 ttg	His ggc Gly tgg Trp agg Arg tgg 295 cgt Arg	aca Thr aga Arg Glu 280 ata Ile Cca Pro	Asn gct Ala aag Lys 265 gaa Glu aac Asn aac att	ctt Leu 250 ctt Leu Arg aca Thr tgc Cys 330 atc	235 aag aag a Glu a ttg a ggt a Gly a cat a ggt a cat a ser a cat	g atom atom atom atom atom atom atom atom	g gtt Val g gta 285 Ala 285 Ala 116 0 gag a Glu g aaa 5 Lys	gagaga Gli cgc 270 g ctc Ga Leu Pro	g Asr g ggt g Gly 255 g ggg g Glu c ata i Ile t Cys t Co c Sei c gct o Ala 335 a cct	Trp 240 gat Asp gtt Val tac Tyr ttt Phe Arg 320 act Thr 5 tct	768 816 864 912 960

129				340					345					350			
	ttc	222	aca		+++	act	aca	act		cct	cta	act	caa		200	asc.	1104
	Phe																1104
133	rne	цуз	355	GIU	FIIC	1111	лта	360	Vai	FIU	пец	1111	365	116	Arg	Asp	
	ata	acc		caa	aat	aat	att		cat	aat	ctc	220		~ 22	atc	220	1152
	Ile	-				_				_		_		-		_	1152
137	116	370	птъ	Arg	ASII	АБР	375	PIO	птэ	ASP	ьeu	380	GIII	GIU	TIE	ьys	
	cat		2+2	a 2 2	22±	224		a 2a	000	22t	aat		999	<i>α</i>	ant.	ata	1200
	His										_			_	_		1200
	385	1111	116	GIII	ASII	390	цец	птэ	ALG	ASII	395	Gry	PIO	Giu	Asp	400	
	att	aca	202	~ 22	~~~		c++	C22	cca	a++		~ 3~	200	002	~~~		1248
	Ile	-		_	_	_			-								1240
145	116	Ата	1111	Giu	405	Mec	пец	GIII	ALG	410	1111	Giu	1111	FIO	415	пуъ	
	tat	aat	aas	a a c		ata	asa	cac	+++		2+2	ttc	cat	22t		att	1296
	Tyr																1250
149	ı yı	Ser	Gry	420	FIIC	vai	Giu	GIII	425	цуз	116	FILE	1113	430	Giu	пец	
	aaa	cat	ttc	-	aat	act	aaa	agt		act	naa	cad	ctt		tct	ato	1344
	Lys																1344
153	БуЗ	лор	435	TIIC	ASII	niu	O±y	440	ncu	1111	Giu	GIII	445	тэр	JCI	NCC	
	aaa	att		atσ	gat	gat	aga		ctt	tct	aca	ctc		tta	+++	+++	1392
	Lys																1372
157	- 7.0	450	501		7100	1101	455	Q ₁	пси	001	711.0	460	71011	шси	1110	1110	
	gaa		aaa	aaα	cac	ctt		aca	tca	gga	αаа		age	aat	att	tta	1440
	Glu																1110
	465	0,0		-70	5	470	1101			017	475					480	
	gag	tta	att	aaa	acc		cat	tet	cta	act		t.t.a	aga	даа	aca		1488
	Glu	_				-				-			_	-			
165				-1-	485					490			5		495		
	ata	aaq	αaa	ctt		agc	aac	tta	cga		gat	act	cct	gat		acc	1536
	Ile					_		_	_		_	_		_		_	
169		-2		500			1		505					510			
	att	qca	atq	cac	caq	aaq	taa	cac	ctt	tat	gag	atc	aac	ctc	qaq	gac	1584
	Ile																
173			515	_		•	-	520		-			525			•	
175	tac	ttt	ttt	gtt	cta	cta	aqc	aga	ttc	ctc	aat	gct	ctt	gaa	act	atg	1632
176	Tyr	Phe	Phe	Val	Leu	Leu	Ser	Arg	Phe	Leu	Asn	Āla	Leu	Glu	Thr	Met	
177	_	530					535	_				540					
179	gga	gga	gct	gat	caa	ctg	gca	aaa	gat	gtg	gga	tca	aga	aac	gtt	gcc	1680
180	Gly	Gly	Āla	Asp	Gln	Leu	Āla	Lys	Āsp	Val	Gly	Ser	Arg	Asn	Val	Ala	
181	545	_		_		550		_	_		555		_			560	
183	tca	tgg	aat	gat	cca	cta	gat	gct	ttg	gtg	ttg	ggt	gtt	cac	caa	gta	1728
	Ser																
185					565					570					575		
187	ggt	cta	tct	ggt	tgg	aag	caa	gaa	gaa	tgt	tta	gcc	att	gga	aat	gaa	1776
	Gly																
189				580		٠			585					590			
191	ctc	ctt	gct	tgg	cga	gaa	agg	gac	cta	ctt	gaa	aaa	gaa	ggg	gaa	gag	1824
	Leu																
193			595					600					605				

							gcc	_				_			_	_	1872
	Asp	-	Lys	Thr	Ile	Trp	Ala	Met	Arg	Leu	Lys		Thr	Leu	Asp	Arg	
197		610					615					620					
		_	_			_	gaa			-	_						1920
		Arg	Arg	Leu	Thr		Glu	Tyr	ser	Asp		Leu	Leu	GIn	He		
	625	~~-				630					635					640	1060
							tta										1968
204	PIO	PIO	ASII	vai	645	тте	Leu	GIY	ьуѕ	650	ьeu	GIY	тте	PIO		Asn	
	aat	ata	224	200		202	gaa	aas	a = a		cat	aat	aas	a++	655	tta	2016
	_	_	_				Glu	_	-			_					2010
209	001		- 7.5	660	-1-		Oru		665	***	5			670		1110	
	caq	atc	tca		ctc	tac	act	att		cta	aaa	act	qta		aat	tca	2064
						_	Thr	_				-	_	_			
213			675	-		•		680			-		685				
215	ctt	ggt	tct	gag	ggc	tgg	gat	gtc	gtt	gta	cct	gga	tcg	acg	tct	ggg	2112
216	Leu	Gly	Ser	Glu	Gly	Trp	Asp	Val	Val	Val	Pro	Gly	Ser	Thr	Ser	Gly	
217		690					695					700					
			_	_	_		agc		_	_			_		_		2160
220	Thr	Leu	Val	Gln	Val	Glu	Ser	Ile	Val	Pro	Gly	Ser	Leu	Pro	Ala	Thr	
	705					710					715					720	
							ctc	_	_			_	_		_	_	2208
	Ser	Gly	Gly	Pro		Ile	Leu	Leu	Val		Lys	Ala	Asp	Gly	_	Glu	
225					725					730					735		2256
							999										2256
228	GIU	vai	ser	740	Ald	ASII	Gly	ASII	745	Ala	GIY	val	меŕ	750	Leu	GIII	
	asa	cta	cct		++~	tat	cac	att		~++	242	aca	ccc		a a a	222	2304
							His										2304
233	014	шеи	755		D Cu	DCI	1115	760	OLY	vai	<i>-</i> 111 9	nia	765	0111	Oru	цуБ	
	att	atc		ata	aca	tat	gat		gat	gac	aaq	att		gat	ata	cga	2352
		-					Asp	-	_	_	_	_	_	_		_	
237		770				- 4	775		- 1-	- 1-	4	780		-		J	
239	cga	ctt	gtg	gga	aaa	ttt	gtg	agg	ttg	gaa	gca	tct	сса	agt	cat	gtg	2400
240	Arg	Leu	Val	Gly	Lys	Phe	Val	Arg	Leu	Glu	Ala	Ser	Pro	Ser	His	Val	
241	785					790					795					800	
							gag										2448
244	Asn	Leu	Ile	Leu	Ser	Thr	Glu	Gly	Arg	Ser	Arg	Thr	Ser	Lys	Ser	Ser	
245					805		•			810					815		
							aag										2496
	Ala	Thr	Lys	_	Thr	Asp	Lys	Asn		Leu	Ser	Lys	Lys	_	Thr	Asp	
249				820					825					830		F	2544
							gat										2544
252	ьys	пув	835	ьeu	ser.	тте	Asp	840	GIU	GIU	ser	гуѕ	845	GIA	ser.	ser	
	tat	tcc		acc	ctc	ctt	tac		tac	224	ast	atc	-	aat	aas	aas	2592
							Tyr										2,32
257	501	850			 _u		855	JC1	JUL	פעם	קניי	860	110		O T Y	J-1	
	atc		qca	ctt	act	gat	gca	gat	ata	cca	act		aat	tca	aaa	tct	2640
			ر- د پ		ے۔ ر	5	J	5	~ د ر				- د د				

	Ile 865	Ile	Ala	Leu .		Asp 870	Ala	Asp	Val	Pro	Thr 875	Ser	Gly	Ser	Lys	Ser 880	
263	act	gca	tat	aat.	ctt	ctt	gca	tet	tta	gca	gaa	acc	tct	agt	aaa	ata	2688
													Ser				
	AIG	AΙα	Cys	_		L Cu	ΑIQ	JCI	БСи	890	Olu	1114		501	895		
265					885												0006
		-	_			_	_	_			_	_	cca			-	2736
268	His	Ser	Glu	His	Gly	Val	Pro	Ala	Ser	Phe	Lys	Val	Pro	Thr	GLY	Val	
269				900					905					910			
271	gtc	ata	cct	ttt	gga	tcg	atg	gaa	tta	gct	tta	aag	caa	aat	aat	tcg	2784
272	Val	Ile	Pro	Phe	Gly	Ser	Met	Glu	Leu	Ala	Leu	Lys	Gln	Asn	Asn	Ser	
273			915		_			920					925				
275	gaa	gaa	aaq	ttt	aca	tct	tta	cta	gaa	aaa	cta	gaa	acc	acc	aga	cct	2832
													Thr				
277	Ora	930	Lys	- 110	- 1- u	001	935	Lea	014	27.5	шец	940				110	
			سنديد											~~~	~-~		2000
													cat				2880
		GIA	GIY	Glu		-	Asp	шe	Cys	Asp		тте	His	GIU	vaı		
	945					950					955					960	
		_	-					-				_	: ata	_			2928
284	Lys	Thr	Leu	Gln	Val	Pro	Lys	Glu	Thr	Ile	Asn	Ser	lle	Ser	Lys	Ala	
285					965					970					975		•
287	ttt	ctc	aaa	gat	gct	cgt	ctc	att	gtt	cgt	tca	agt	gct	aac	gto	gag	2976
				_	_	_			_	_		-	Āla		_		
289			-	980		_			985					990			
	gac	tta	acc		ato	tca	act	gca		a cto	c ta	t da	a tc		tc c	ct aac	3024
																	3021
	rob	пeи	Ala										11 50	rı		ro den	
	-			0 17	1100	JCI	AIG		_	у пе	u ry	r GI			те ь	ro Asn	
293	_		995	_				1000)	-	_		10	05			3060
293 295	gtg	agt	995 ccc	tcg	gat	cct	ttg	1000 g gt	o ig ti	tt to	ca g	at t	10 .cg	05 gtt	tgc	caa	3069
293 295 296	_	agt Ser	995 ccc Pro	_	gat	cct	tto Le	1000 g gt ı Va	o ig ti	-	ca g	at t sp S	10 .cg Ser	05	tgc	caa	3069
293 295 296 297	gtg Val	agt Ser 1010	995 ccc Pro	tcg Ser	gat Asp	cct Pro	tto Lev	1000 g gt u Va 15	o ig ti al Pl	tt to ne Se	ca g	at t sp S	10 .cg .er .020	05 gtt Val	tgc Cys	caa Gln	
293 295 296 297	gtg	agt Ser 1010	995 ccc Pro	tcg	gat Asp	cct Pro	tto Lev	1000 g gt u Va 15 a ag	o ng ti al Pl ga ag	tt to ne So ga go	ca g er A	at t sp S 1 tt c	10 .cg .er .020 :ta	05 gtt	tgc Cys	caa Gln	3069 3114
293 295 296 297 299	gtg Val	agt Ser 1010	995 ccc Pro pro	tcg Ser	gat Asp	cct Pro	tto Lev 10:	1000 g gt u Va 15 a ag	o ng ti al Pl ga ag	tt to ne Se	ca g er A	at t sp S 1 tt c	10 .cg .er .020 :ta	05 gtt Val	tgc Cys cgt	caa Gln aga	
293 295 296 297 299	gtg Val gtt	agt Ser 1010	995 ccc Pro) gct Ala	tcg Ser	gat Asp	cct Pro	tto Lev 10:	1000 g gt a Va 15 a ag	o ng ti al Pl ga ag	tt to ne So ga go	ca g er A	at t sp S 1 tt c	10 .cg .er .020 :ta	05 gtt Val agc	tgc Cys cgt	caa Gln aga	
293 295 296 297 299 300 301	gtg Val gtt	agt Ser 1010 tgg Trp 1025	995 ccc Pro) gct Ala	tcg Ser	gat Asp ctc Leu	cct Pro tac Tyr	tto Lev 10: aca Thr	1000 g gt u Va 15 a ag r Ar	o tg ti al Pl ga ag rg A:	tt to ne Se ga go rg A	ca g er A ct g la V	at t sp S 1 tt c al L	10 cg er .020 ta .eu .035	05 gtt Val agc	tgc Cys cgt Arg	caa Gln aga Arg	
293 295 296 297 299 300 301 303	gtg Val gtt Val	agt Ser 1010 tgg Trp 1025 gct	995 ccc Pro gct Ala	tcg Ser tct Ser	gat Asp ctc Leu	cct Pro tac Tyr	Let 10: 2 aca Thi 10: a aga	1000 g gt u Va 15 a ag r Ai 30 a ga	o to	tt to ne Se ga go rg A	ca ger A	at tsp S tt cal L tg g	10 cg er .020 ta .eu .035	05 gtt Val agc Ser	tgc Cys cgt Arg	caa Gln aga Arg gtt	3114
293 295 296 297 299 300 301 303 304	gtg Val gtt Val gct	agt Ser 1010 tgg Trp 1025 gct Ala	995 CCC Pro 9ct Ala 5 ggt	tcg Ser tct Ser	gat Asp ctc Leu	cct Pro tac Tyr	Let 10: 2 aca Thi 10: a aga	1000 g gt 1 Va 15 a ag r An 30 a ga	o to	tt to ne So ga go rg Al	ca ger A	at t sp S tt c al L tg g et A	10 cg er .020 ta .eu .035	05 gtt Val agc Ser	tgc Cys cgt Arg	caa Gln aga Arg gtt	3114
293 295 296 297 299 300 301 303 304 305	gtg Val gtt Val gct Ala	agt Ser 1010 tgg Trp 1025 gct Ala 1040	995 ccc Pro gct Ala 5 ggt Gly	tcg Ser tct Ser gtc	gat Asp ctc Leu tct Ser	cct Pro tac Tyr caa	Let to Let 10: aca 10: aga Arg	1000 1000	o tig the plant of	tt to ne So ga go rg Al	ca ger A ct g la V ca a er M	at t sp S tt c al L tg g et A	cg ser .020 :ta .eu .035 gct	05 gtt Val agc Ser gtt Val	tgc Cys cgt Arg ctc Leu	caa Gln aga Arg gtt Val	3114 3159
293 295 296 297 299 300 301 303 304 305 307	gtg Val gtt Val gct Ala	agt Ser 1010 tgg Trp 1025 gct Ala 1040 gaa	995 ccc Pro gct Ala Gly Gly atg	tcg Ser tct Ser yal	gat Asp ctc Leu tct Ser	cct Pro tac Tyr caa Glr	tto Lev 10: aca Thi 10: a aga Arg 104	1000 9 9t 1 Value 15 a ag 30 a ga GB GB	tg ti al Pl ga ag rg Ar aa go lu Ar	tt tone Song ga go Al Ct to la So	ca ger A ct g la V ca a er M	at t sp S tt c al I tg g et A	10 cg ser .020 ta .eu .035 gct .1a .050	05 gtt Val agc Ser gtt Val	tgc Cys cgt Arg ctc Leu	caa Gln aga Arg gtt Val	3114
293 295 296 297 299 300 301 303 304 305 307 308	gtg Val gtt Val gct Ala	agt Ser 1010 tgg Trp 1025 gct Ala 1040 gaa Glu	995 ccc Pro gct Ala Gly Gly atg	tcg Ser tct Ser gtc	gat Asp ctc Leu tct Ser	cct Pro tac Tyr caa Glr	tto Lev 10: aca Thr 10: aga Arq 104 gao	1000 g gt 1 Va 15 a ag 30 a ga 45 c tt c Le	tg ti al Pl ga ag rg Ar aa go lu Ar	tt to ne So ga go rg Al	ca ger A ct g la V ca a er M	at t sp S tt c al I tg g et A tt c al I	10 cg ser .020 ta .035 gct .1a .050 etg	05 gtt Val agc Ser gtt Val	tgc Cys cgt Arg ctc Leu	caa Gln aga Arg gtt Val	3114 3159
293 295 296 297 299 300 301 303 304 305 307 308	gtg Val gtt Val gct Ala caa Gln	agt Ser 1010 tgg Trp 1025 gct Ala 1040 gaa Glu 1055	995 CCC Pro gct Ala Ggt Gly atg Met	tcg Ser tct Ser yal	gat Asp ctc Leu tct Ser tcg	cct Pro tac Tyr caa Gln	tto Lev 10: aca Thi 10: aga 104 gao Asi	1000 g gt 1 Va 15 a ag 30 a ga 45 c ti 50 Le 50	ga ag rg A: aa go lu A: ta to	tt tone Sone ga go	ca ger A ct gla V. ca a aer M tc ghe V.	at t sp S tt c al I tg g et A tt c al I	10 cg ser .020 ta .035 gct .1a .050 etg .eu	05 gtt Val agc Ser gtt Val cac	tgc Cys cgt Arg ctc Leu aca Thr	caa Gln aga Arg gtt Val gtg Val	3114 3159 3204
293 295 296 297 299 300 301 303 304 305 307 308 309 311	gtg Val gtt Val gct Ala caa Gln	agt Ser 1010 tgg Trp 1025 gct Ala 1040 gaa Glu 1055 cca	995 CCC Pro gct Ala Ggt Gly atg	tcg Ser tct Ser yal ctt Leu	gat Asp ctc Leu tct Ser tcg Ser	tac Tyr caa Glr ccg Pro	tto Let 10: aca Thr 10: aga Arg 10: y gad 10: agt	1000 gt Value Valu	tg that plant and ga age and and all all all all all all all all all al	tt tone Songa go ga go g	ca gar A ct gar A ct gar M ca a a ct gar M ct c gar M c	at t sp S tt c al I tg g et A tt c al I aa g	10 cg er .020 ta .035 gct .1a .050 etg .eu	05 gtt Val agc Ser gtt Val cac His	tgc Cys cgt Arg ctc Leu aca Thr	caa Gln aga Arg gtt Val gtg Val	3114 3159
293 295 296 297 299 300 301 303 304 305 307 308 309 311 312	gtg Val gtt Val gct Ala caa Gln	agt Ser 1010 tgg Trp 1025 gct Ala 1040 gaa Glu 1055 cca Pro	995 CCC Pro gct Ala Gly atg Met Glt Ala	tcg Ser tct Ser yal	gat Asp ctc Leu tct Ser tcg Ser	tac Tyr caa Glr ccg Pro	tto Lev 10: aca Thi 10: aga Arg 10: y gao 10: agt 20: Asi 20: Asi 20: Asi 20: Seri	1000 gt Value Valu	tg that plant and ga age and and all all all all all all all all all al	tt tone Sone ga go	ca gar A ct gar A ct gar M ca a a ct gar M ct c gar M c	at tsp S tt cal I tg S et A tt cal I aa S lu A	10 cg Ger .020 ta .035 gct .050 tg .eu .065 gcc	05 gtt Val agc Ser gtt Val cac	tgc Cys cgt Arg ctc Leu aca Thr	caa Gln aga Arg gtt Val gtg Val	3114 3159 3204
293 295 296 297 299 300 301 303 304 305 307 308 309 311 312 313	gtg Val gtt Val gct Ala caa Gln agt	agt Ser 1010 tgg Trp 1025 gct Ala 1040 gaa Glu 1055 cca Pro 1070	995 CCC Pro gct Ala Gly atg Met Glt Ala	tcg Ser tct Ser Val ctt Leu gat	gat Asp ctc Leu tct Ser tcg Ser ccg Pro	tac Tyr caa Glr ccg Pro	tto 10: aca Thi 10: aga Are 10: gao Asp 10: agt 10: Sei	1000 gt Value Valu	tg that plant and plant an	tt tone Song ga go ga	ca ger A ct g gla V ca a er M tc g the V tg gal G	at t sp S tt c al I tg S et A tt c al I aa S lu A	10 cg ser .020 ta .035 gct .050 tg .065 gcc .1a	os gtt Val agc Ser gtt Val cac His gag	tgc Cys cgt Arg ctc Leu aca Thr	caa Gln aga Arg gtt Val gtg Val gct Ala	3114 3159 3204 3249
293 295 296 297 299 300 301 303 304 305 307 308 309 311 312 313 315	gtg Val gtt Val gct Ala caa Gln agt ser	agt Ser 1010 tgg Trp 1025 gct Ala 1040 gaa Glu 1055 cca Pro 1070 ggt	995 CCC Pro gct Ala Gly atg Met Glt Ala	tcg Ser tct Ser Val ctt Leu gat Asp	gat Asp ctc Leu tct Ser tcg Pro	cct Pro	tto Lev 10: aca Thr 10: aga 10: y gad 10: agt 10: ser 10: tta	1000 gt Value Valu	tig that play a again ag	tt tone Song ga gga gga All to Song All a Song a treer Pl	ca gar A ct g ga a a ga a	at tsp State I tsp	10 cg ser .020 ta .035 gct .050 tg .065 gcc .1a .080	05 gtt Val agc Ser Val cac His gag Glu gga	tgc Cys cgt Arg ctc Leu aca Thr atc Ile	caa Gln aga Arg gtt Val gtg Val gct Ala cca	3114 3159 3204
293 295 296 297 299 300 301 303 304 305 307 308 309 311 312 313 315	gtg Val gtt Val gct Ala caa Gln agt ser	agt Ser 1010 tgg Trp 1025 gct Ala 1040 gaa Glu 1055 cca Pro 1070 ggt Gly	995 CCC Pro gct Ala Gly atg Met Gct Ala Leu	tcg Ser tct Ser Val ctt Leu gat	gat Asp ctc Leu tct Ser tcg Pro	cct Pro	tto Let 10: aca Thr 10: aga 10: y gao 10: agt 10: tta tta	1000 gt Value Valu	tig that play a again ag	tt tone Song ga gga gga All to Song All a Song a treer Pl	ca gar A ct g ga a a ga a	at tsp State I tsp	10 cg ser .020 ta .035 gct .050 tg .065 gcc .1a	05 gtt Val agc Ser Val cac His gag Glu gga	tgc Cys cgt Arg ctc Leu aca Thr atc Ile	caa Gln aga Arg gtt Val gtg Val gct Ala cca	3114 3159 3204 3249
293 295 296 297 299 300 301 303 304 305 307 308 309 311 312 313 315	gtg Val gtt Val gct Ala caa Gln agt ser	agt Ser 1010 tgg Trp 1025 gct Ala 1040 gaa Glu 1055 cca Pro 1070 ggt	995 CCC Pro gct Ala Gly atg Met Gct Ala Leu	tcg Ser tct Ser Val ctt Leu gat Asp	gat Asp ctc Leu tct Ser tcg Pro	cct Pro	tto Lev 10: aca Thr 10: aga 10: y gad 10: agt 10: ser 10: tta	1000 gt Value Valu	tig that play a again ag	tt tone Song ga gga gga All to Song All a Song a treer Pl	ca gar A ct g ga a a ga a	at tsp S tt cal I tt cal I tal I aa S lu A ca a hr A	10 cg ser .020 ta .035 gct .050 tg .065 gcc .1a .080	05 gtt Val agc Ser Val cac His gag Glu gga	tgc Cys cgt Arg ctc Leu aca Thr atc Ile	caa Gln aga Arg gtt Val gtg Val gct Ala cca	3114 3159 3204 3249
293 295 296 297 299 300 301 303 304 305 307 311 312 313 315 316 317	gtg Val gtt Val gct Ala caa Gln agt Ser cct Pro	agt Ser 1010 tgg Trp 1025 gct Ala 1040 gaa Glu 1055 cca Pro 1070 ggt Gly 1085	995 ccc Pro gct Ala Gly atg Met Gct Ala Ccc Ccc Ccc Ccc Ccc Ccc Ccc Ccc Ccc Cc	tcg Ser tct Ser Val ctt Leu gat Asp	gat Asp ctc Leu tct Ser tcg Ser ccg Pro	tac Tyr caa Glr ccg Pro	tto 10: aca: Thi 10: aga: 104 gao; Asi 106 agt: 107 tta 108	1000 1000	ga ag a	tt tone Song ga gga gga All to Song All a Song a treer Pl	ca gar A ct grant a ct	at tsp State I tsp	10 ccg ser .020 ta .035 gct .1a .050 tg .eu .065 gcc .1a .080 aga	05 gtt Val agc Ser Val cac His gag Glu gga	tgc Cys cgt Arg ctc Leu aca Thr atc Ile aca	caa Gln aga Arg gtt Val gtg Val gct Ala cca Pro	3114 3159 3204 3249
293 295 296 297 299 300 301 303 304 305 307 311 312 313 315 316 317 319	gtg Val gtt Val gct Ala caa Gln agt Ser cct Pro	agt Ser 1010 tgg Trp 1025 gct Ala 1040 gaa Glu 1055 cca Pro 1070 ggt Gly 1085 aga	995 ccc Pro gct Ala Gly Atg Met Gct Ccc Ccc Ccc Ccc Ccc Ccc Ccc Ccc Ccc C	tcg Ser tct Ser Val ctt Leu gat Asp	gat Asp ctc Leu tct Ser tcg Ser ccg Pro gag Glu tcg	tac Tyr caa Glr ccg Pro Asp	tto Let 10: aca Thr 10: aga 10: Asp 10: Ser 10: tta 10: tta 10: aga 10: a aga 10: a a a a a a a a a a a a a a a a a a a	1000 9 9 9 9 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ga aga aga aga aga aga aga aga aga aga	tt tone Se ga ge ga ga ga ga tte se tt great tte great tte great tte ga	ca gar A ct grant a ct	at tsp 1 tt cal I lt	10 ccg ser .020 ta .035 gct .1a .050 teu .065 gcc .1a .080 aga .095 gta	os gtt Val agc Ser gtt Val cac His gag Glu	tgc Cys cgt Arg ctc Leu aca Thr atc Ile aca Thr	caa Gln aga Arg gtt Val gtg Val gct Ala cca Pro	3114 3159 3204 3249 3294
293 295 296 297 299 300 301 303 304 305 307 318 312 313 315 316 317 319 320	gtg Val gtt Val gct Ala caa Gln agt Ser cct Pro	agt Ser 1010 tgg Trp 1025 gct Ala 1040 gaa Glu 1055 cca Pro 1070 ggt Gly 1085 aga	995 ccc Pro gct Ala Gly Atg Met Gct Ala Cct Cct Cct	tcg Ser tct Ser Val ctt Leu gat Asp	gat Asp ctc Leu tct Ser tcg Ser ccg Pro gag Glu tcg	tac Tyr caa Glr ccg Pro Asp	tto Let 10: aca Thr 10: aga 10: Asp 10: Ser 10: tta 10: tta 10: aga 10: a aga 10: a a a a a a a a a a a a a a a a a a a	1000 B gt 15 B a ag 15 B t 15 C t 15 C t 15 C t 16 C A 17 C A 17 C C 16	ga aga aga aga aga aga aga aga aga aga	tt tone Se ga ge ga ga ga ga tta se tt grant tt grant tt grant tt grant tt ga	ca gar A ct grant a ct	at tsp 1 tt 1 tt 2 tt 2 tt 2 tt 2 tt 2 tt 2 t	10 ccg ser .020 ta .035 gct .1a .050 teu .065 gcc .1a .080 aga .095 gta	os gtt Val agc Ser gtt Val cac His gag Glu gga Gly caa	tgc Cys cgt Arg ctc Leu aca Thr atc Ile aca Thr	caa Gln aga Arg gtt Val gtg Val gct Ala cca Pro	3114 3159 3204 3249 3294
293 295 296 297 299 300 301 303 304 305 307 318 312 313 315 316 317 319 320 321	gtg Val gtt Val gct Ala caa Gln agt Ser cct Pro	agt Ser 1010 tgg Trp 1025 gct Ala 1040 gaa Glu 1055 cca Pro 1070 ggt Gly 1085 aga Arg	995 ccc Pro gct Ala Gly Atg Met Ala Leu Ctc Leu	tcg Ser tct Ser Val ctt Leu Asp Gly	gat Asp ctc Leu tct Ser tcg Pro gag Glu tcg Ser	tac Tyr caa Glr cce Pro Asp act Thr	tto Let 10: aca Thi 10: aga 10: Asp 10: Sei tta 10: ta 10: ta 10: tta 10: tta 10: tta 10: tta 10: tta 10: tta 10: tta 10: tta 10: tta 10: tta 10: tta 10: tta 10: tta 10: ta 10: tta 10: tta 10: tta 10: tta 10: tta 10: ta 10: tta 10: 10: ta 10: ta 10: ta 10: ta 10: ta 10 ta 10 10 10 1 10 1 1 10 1 10 1 1 1 1 1 1	1000 B gt 1 Va 15 a aq 7 A 30 a G 45 b t 60 c A 75 a g 60 c A 60 C C 60	ga ag ag	tt tone Song a go ga go ga tto go ga	ca gar A ct grant a a a ct car M ct car	at tsp 1 ttal I ttal I tal I aa A ca A ttal I ttal	10 cg ser .020 :ta .035 sct .1a .050 :eu .065 scc .1a .080 .095 sta .7a1	os gtt Val agc Ser gtt Val cac His gag Glu gga Gly caa Gln	tgc Cys cgt Arg ctc Leu aca Thr atc Ile aca Thr	caa Gln aga Arg gtt Val gtg Val gct Ala cca Pro tta Leu	3114 3159 3204 3249 3294
293 295 296 297 299 300 301 303 304 305 307 308 311 312 313 315 316 317 319 320 321 323	gtg Val gtt Val gct Ala caa Gln agt Ser cct Pro	agt Ser 1010 tgg Trp 1025 gct Ala 1040 gaa Glu 1055 cca Pro 1070 ggt 1085 aga Arg 1100 ttc	995 ccc Pro gct Ala Gly Atg Met Ala Leu Ctc Leu gca	tcg Ser tct Ser Val ctt Leu gat Asp	gat Asp ctc Leu tct Ser tcg Pro gag Glu tcg ser	tac Tyr caa Glr ccg Pro Asp act Thr	tto Let 10: aca Thi 10: aga 10: Sei 10: tta 10: ta 10: ta 10: tta 10: tta 10: ta 10: tta 10: ta 10: ta 10: ta 10: ta 10: tta 10: ta 10 ta 10 ta 10 10 10 10 10 1 10 10 1 1 10 1 1 1 1	1000 B gt 1 Va 15 a aq 7 A 30 a ga 45 b t 60 c A 75 a ga 60 C t 6	org that plant and plant a	tt tone Se ga ge ga ga ga ga tta se tt grant tt grant tt grant tt grant tt ga	ca ga A car A car A car M car	at tsp 1 tal I tg A tal I tal	10 cg ser .020 :ta .035 sct .1a .050 :eu .065 scc .1a .080 .095 sta .7a1	os gtt Val agc Ser gtt Val cac His gag Glu gga Gly caa	tgc Cys cgt Arg ctc Leu aca Thr atc Ile aca Thr	caa Gln aga Arg gtt Val gtg Val acca Pro tta Leu ggt	3114 3159 3204 3249 3294

Input Set : N:\RJAVED\10591432.txt

Output Set: N:\CRF4\09132006\J591432.raw

Invalid Line Length:

The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:1; Line(s) 8

VERIFICATION SUMMARY DATE: 09/13/2006
PATENT APPLICATION: US/10/591,432 TIME: 13:16:44

Input Set : N:\RJAVED\10591432.txt

Output Set: N:\CRF4\09132006\J591432.raw

L:12 M:270 C: Current Application Number differs, Replaced Current Application Number L:42 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:1,Line#:39
L:670 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:3,Line#:667
L:1321 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:6,Line#:1314
L:2127 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:8,Line#:2120
L:2871 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:10,Line#:2864
L:3665 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:12,Line#:3658
L:4443 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:14,Line#:4436
L:5231 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:16,Line#:5224